March 25, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Priscilla W. Burton, Sr. Reclamation Specialist/Soils

RE: Technical Field Visit, Phase II Reclamation, Energy West Corp., Des Bee Dove Mine, C/015/017

Other Attendees:

Mr. Chuck Semborski, Energy West Mining

Date & Time: March 19, 2003, 12:30 p.m. – 3:40 p.m.

PURPOSE:

To observe the progress of Phase II reclamation.

OBSERVATIONS:

Recent snowfall has kept the site quite moist. There was no dust problem. Reclamation and seeding was complete from Station 12+00 through Station 16+00 (Plate 500-3). David Hansen, an engineer from Hansen Allen and Luce, recently toured the site.

Two scrapers, each with 27-yard capacity, were removing refuse from the slope above the tipple yard and either depositing it on the bathhouse pad for placement in the southern trench or carrying it to Sta 4+00 in the main drainage. Rubber-tired dozers were compacting the refuse. A trackhoe and dozer were moving waste at the tipple yard and a trackhoe was moving large boulders down in the main drainage.

The cut slopes of the bathhouse pad were buried underneath a compacted slope of mine waste that was sampled by Mr. Semborski to a depth of two feet. These samples were sent to Intermountain Labs/Sheridan for analysis of the parameters required for rooting zone suitability evaluation. The results of these analyses will determine the depth of cover required over the waste on the bathhouse pad.

The stockpile of substitute topsoil material from the upper drainage is against the south side of tipple yard and holds approximately 2,000 cu yds. A stockpile of 2,500 cu yds substitute topsoil from the southern bathhouse pad is stored on the main access road below the tipple yard. Additional substitute topsoil will be gained from increasing the angle of the slope on the recovered trench. According to Mr. Semborski, the previous natural grade of 29 degrees can be seen in the trench and pulling the outslope back to this original configuration will create a larger wedge of substitute topsoil for use on the rest of the site. This will create a 55.4% slope which is a bit steeper than 2h:1v or 50% slope.

The stockpile of the best looking material that was scraped off of the cliff below the Beehive access road has been used as fill in the main drainage (see Reclamation Procedure page 8 of Section R645-301-500 Appendix XV). Last month (2/26/03), it was thought that this fill would become the upper four feet of the main drainage, but that level was not achieved. Therefore, Mr. Oakley did not sample this material for analysis of acid/toxic forming properties as earlier stated.

The material on the side slopes above the main drainage at Sta 1+00 to 2+00 is to be the final surface layer. This soil was sampled by Mr. Semborski to verify its suitability as substitute topsoil. I also took a sample of this soil. It has the following properties:

Location	East Side St 2+00	West Side Sta 2+00
Moist Color	10YR 2/1	10YR 2/2
Texture	gravelly clay loam	gravelly clay loam
1:1 extract Electrical Conductivity	2.34 mmhos/cm	2.84 mmhos/cm
Paste pH from Mr. Semborski	8.14	8.16

Mr. Semborski has taken the soil to a laboratory for confirmation of the texture. On March 24, 2003, this 0.02-acre area had already been gouged, mulched, and seeded.

Photos from this date can be viewed under the folder name 03192003 at:
ftp://ogm.utah.gov/PUB/MINES/coal/Images/015/017

RECOMMENDATIONS/CONCLUSIONS:

Currently, there is about 2,500 cu yds of substitute topsoil stored on site from the southern bathhouse trench, and 2,000 cu yds stored as the best excavated from the Tipple yard. About 1,600 cu yds from Phase I and the 1st Change Order site was used on the Deseret pad and access road area.

The reclamation plan (Table 5, page 13, Appendix XV) has identified the potential for excavation of 17,000 cu yds from the bathhouse pad (Table 5). This should provide an ample amount of substitute topsoil for coverage of the coal mine waste and treatment of the slopes of the tipple yard and the main drainage. Substitute topsoil cover may even approach 1.5 feet in depth as noted on page 14 of Chap 2, App XV.

The Permittee would like to avoid excavation of another bathhouse trench because of the time and expense. The choice of better material than that outlined in Table 5 should be substantiated with laboratory analysis of the soil, i.e. pH, EC, texture, SAR and field analysis of percent coal.

cc: All Attendees
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